

# State Route 91/State Route 71 Interchange Improvement Project

State Routes 91 and 71  
Riverside County  
08-Riv-91 PM R0.6/R2.6  
08-Riv-71 PM 1.6/3.0  
EA 0F5410/PN 0800000137



## Initial Study and Proposed Mitigated Negative Declaration Prepared by the State of California Department of Transportation

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.



November 2010

## GENERAL INFORMATION ABOUT THIS DOCUMENT

### What's in this document:

The California Department of Transportation-District 8 (Department), in cooperation with the Riverside County Transportation Commission (RCTC), have prepared this Initial Study (IS), which examines the potential environmental impacts of the alternatives being considered for the proposed project located at the State Route 91/State Route 71 interchange within the limits of the City of Corona in Riverside County, California. The document describes why the project is being proposed, alternatives for the project, the existing environment that could be affected by the project, the potential impacts from each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

### What you should do:

Please read the IS. Additional copies of this document, as well as the technical studies, are available for review at:

<b>Riverside County</b> Transportation Commission 4080 Lemon Street, 3 <sup>rd</sup> Floor Riverside, CA 92502-2208. M-F: 8:00 a.m. to 5:00 p.m.	<b>Corona Public Library</b> 650 S. Main Street Corona, CA 92882 M-Tue: 12:00 p.m. to 9:00 p.m. Wed-Thurs: 10:00 a.m. to 6:00 p.m. Sat: 10:00 a.m. to 5:00 p.m.	<b>Caltrans, District 08</b> 464 W. 4th Street, 6th Floor San Bernardino, CA 92401-1400 Please call (909) 383-4445 for an appointment
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- We invite you to attend a public information meeting regarding the proposed project at the Corona City Hall on December 9, 2010, from 5:00 p.m. to 8:00 p.m.
- We welcome your comments. If you have any comments regarding the proposed project, please send them to the Department by the deadline indicated below.

Submit comments via postal mail to:

*Attention: Aaron Burton  
Environmental Branch Chief  
Environmental Studies "B"  
California Department of Transportation  
464 West 4<sup>th</sup> Street, 6<sup>th</sup> Floor, MS 1163  
San Bernardino, CA 92401-1400*

Submit comments via e-mail to: [Aaron\\_Burton@dot.ca.gov](mailto:Aaron_Burton@dot.ca.gov) or at the project Web site <http://www.sr91-sr71project.info/comments.asp>

- *Please submit comments by December 21, 2010.*

### What happens next:

After comments are received from the public and reviewing agencies, the Department may: (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is appropriated, the Department could design and construct all or part of the project.

For individuals with sensory disabilities, this document can be made available in Braille, large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call (951) 787-7151 or write RCTC, 3850 Vine Street, Suite 201, Riverside, CA 92504, Attn.: Mr. Khalid Bazmi or use California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice) or 711.

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State Route 91/State Route 71 Interchange Improvement Project,  
(SR 91 PM R0.6/R2.6; SR 71 PM 1.6/3.0)  
in the City of Corona, Riverside County

**INITIAL STUDY with Proposed Mitigated Negative Declaration**

Submitted Pursuant to: (State) Division 13, California Public Resources Code and 49USC 303

THE STATE OF CALIFORNIA  
Department of Transportation

Riverside County Transportation Commission

11/19/10

\_\_\_\_\_  
Date of Approval



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David Bricker  
Deputy District Director  
District 8 Division of Environmental Planning  
California Department of Transportation

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## Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

### Project Description

The California Department of Transportation (Department), in cooperation with the Riverside County Transportation Commission (RCTC), proposes to improve the State Route (SR) 91/SR 71 interchange by constructing a new direct flyover connector from eastbound SR 91 (post mile [PM] R0.6/R2.6) to northbound SR 71 (PM 1.6/3.0). The proposed project includes the following project components: flyover connector ramp, bridge widening, restriping of SR 91 eastbound lanes, modification or construction of new drainage facilities, retaining walls, and relocation of access roads. The proposed project would improve the current and future operational efficiency and enhance the capacity of the eastbound SR 91 to northbound SR 71 connector.

### Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is the Department's intent to adopt an MND for this project. This does not mean that the Department's decision regarding the project is final. This MND is subject to modification based on comments received by interested agencies and the public.

The Department has prepared an Initial Study (IS) for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no effect related to the following resources:

Agricultural Resources

Mineral Resources

In addition, the proposed project would have no significant effects related to the following resources:

Land Use and Planning

Relocations/Real Estate Acquisition

Community Impacts

Utilities and Service Systems

Utilities and Emergency Services

Parks and Recreation

Growth

Paleontological Resources

Cultural Resources

The proposed project would have no significantly adverse effects on Traffic/Transportation, Aesthetics, Hydrology/Water Quality, Geology, Hazardous Waste, Air Quality, Noise, and Biological Environment because the following mitigation measures would reduce potential effects to insignificance:

### **Traffic/Transportation**

- TC-1** Prior to project construction, a Transportation Management Plan (TMP) will be prepared to address the detours and traffic issues that may occur to the traveling public as a result of construction activities. The TMP will address elements such as signage, traffic controls, Construction Zone Enhanced Enforcement Program (COZEEP), and public awareness campaign.
- TC-2** During the design phase, RCTC will coordinate with the City of Corona, United States Army Corps of Engineers (USACE), and other affected parties to ensure that access to their jurisdictions or properties will be maintained during construction.

### **Aesthetics**

- AES-1** Work with the community during preliminary design to implement the Aesthetics and Landscape Master Plan for the project improvements through a formalized structure that allows for community input.
- AES-2** Develop Context-Sensitive Solutions for the aesthetic and landscape treatments of the project elements based on the Caltrans Aesthetics and Landscape Master Plan.
- AES-3** Use clear panel soundwalls to preserve existing views for hillside residents. The Hillside Residential Landscape Unit (Viewpoint 12) is identified by the residential development patterns found on the sides and tops of the slopes across the valley from the Chino Hills and Prado Dam areas.
- AES-4** Apply architectural detailing to the proposed bridges in the corridor, including textures, colors, and patterns. Potential bridge elements that might receive aesthetics treatments include columns, pier caps, parapets, fencing, abutment, and wing walls.
- AES-5** Apply architectural detailing to the retaining walls, including textures, colors, and patterns. Include caps that will provide shadow lines, as shown in the Caltrans Aesthetics and Landscape Master Plan.
- AES-6** Save and protect as much existing vegetation as feasible, especially trees.

- AES-7** Include skyline trees in the new plantings to help break up views to the new flyover.
- AES-8** Utilize drainage and water quality elements, where required, that maximize the allowable landscape. Place any water quality or detention ponds out of clear view of the interchange or from the highway. If this is not possible, integrate these features into the landscape design.
- AES-9** Landscape and revegetate disturbed areas to the greatest extent feasible. Landscaping should include appropriate irrigation, establishment, and maintenance to assure ongoing success of the plantings.

### **Water Quality and Stormwater Runoff**

The Contractor must conform to current Federal, State, and local regulatory requirements to minimize impacts to water resources and water quality, including:

- WQ-1** Conform to the requirements of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Storm Water Permit, Order No. 99-06-DWQ, NPDES No. CAS000003, adopted by the State Water Resources Control Board (SWRCB) on July 15, 1999, in addition to the Best Management Practices (BMPs) specified in the Caltrans Storm Water Management Plan (SWMP) (Caltrans 2007b). When applicable, the Contractor shall also conform to the requirements of the General NPDES Permit for Construction Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002 and any subsequent General Permit in effect at the time of project construction.
- WQ-2** Prepare and implement the Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall address all State and Federal water control requirements and regulations. The SWPPP shall address all construction-related activities, equipment, and materials that have the potential to impact water quality. The SWPPP shall include BMPs to control pollutants, sediment from erosion, stormwater runoff, and other construction-related impacts. In addition, the SWPPP shall include the provisions of SWRCB Resolution No. 2001-046, which requires implementation of specific Sampling Analysis Procedures to ensure that the implemented BMPs are effective in preventing the exceedance of any water quality standards. The results of the risk-level determination indicate that the proposed project has a Risk Level of 1, which directs the project to implement the following Risk Level 1 requirements:

- Effluent Standards
- Good Site Management “Housekeeping”
- Non-Stormwater Management
- Sediment Controls
- Run-on and Runoff Controls
- Inspection, Maintenance, and Repair

Risk Level 1 Monitoring and Reporting Requirements specific implementation details regarding these requirements are found in Attachment C of the *NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2009-0009-DWQ* (September 2009).

- WQ-3** File a Notice of Intent (NOI) with the SWRCB at least 30 days prior to any soil-disturbing activities.
- WQ-4** Conform all work to the Construction Site BMP (Category II) requirements specified in the latest edition of the Caltrans SWMP to control and minimize the impacts of construction and construction-related activities, materials, and pollutants on the watershed. These include, but are not limited to, temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-stormwater BMPs. For a complete list, refer to Section 4.5 of the Caltrans SWMP (2007b).
- WQ-5** Give special attention to stormwater pollution control during the rainy season, which is defined by the Regional Water Quality Control Board (RWQCB) as October 1 through May 1. No work will be conducted when rain is predicted. Water Pollution Control BMPs will be used to minimize impacts to receiving waters. Measures would be incorporated to contain all vehicle loads and avoid any tracking of materials, which may fall or blow onto Caltrans right-of-way (ROW).
- WQ-6** Dewatering is not anticipated for the proposed project; however, if dewatering is necessary, then this project will fully conform to Order No. R8-2009-0003 (NPDES No. CAG998001), General Waste Discharge Requirements for Discharges to Surface Water which Pose an Insignificant (De Minimis) Threat to Water Quality, from the Santa Ana RWQCB. Dewatering BMPs will be used to control sediments and pollutants. A United States Environmental Protection Agency (EPA)-certified laboratory will test and monitor the discharge for compliance with the requirements of the RWQCB.

**WQ-7** The Caltrans SWMP describes BMPs and practices to reduce the discharge of pollutants associated with the stormwater drainage systems of State highways, facilities, and activities. The completed project plans will incorporate all necessary Maintenance BMPs (Category IA), Design Pollution BMPs (Category IB), and Treatment BMPs (Category III) to meet the Maximum Extent Practicable (MEP) requirements. A combination of BMPs from the following categories will be implemented as part of the proposed project:

- Maintenance BMPs – This category includes routine maintenance work, such as litter pickup, toxics control, street sweeping, drainage, and channel cleaning.
- Design Pollution Prevention BMPs – Permanent soil stabilization systems will be incorporated into project design, such as preservation of existing vegetation, concentrated flow conveyance systems (e.g., drainage ditches, dikes, berms, swales), and slope/surface protection systems that utilize either vegetated or hard surfaces. Definition of Design Pollution Prevention BMPs will occur during final design.
- Treatment BMPs – The applicability of all nine Caltrans-approved Treatment BMPs were analyzed as part of this project. This category of BMPs includes traction sand traps, infiltration devices, detention devices, biofiltration strips/swales, dry weather flow diversion, media filters, multi-chamber treatment trains, wet basins, and gross solids removal devices (GSRDs).

**WQ-8** Prior to the disturbance of all jurisdictional drainages, the following are required:

- Obtain and conform to CWA Section 404 permit issued by USACE prior to disturbance of all jurisdictional drainages.
- Obtain and conform to CWA Section 401 Water Quality Certificate issued by Santa Ana RWQCB prior to disturbance of all jurisdictional drainages.
- Obtain and conform to Streambed Alteration Agreement from CDFG prior to disturbance of all jurisdictional drainages.
- Compensatory mitigation measures for impacts to jurisdictional drainages shall adhere to requirements contained within Section 2.3 of this IS.

### **Geology/Soils/Seismic/Topography**

**GEO-1** A site-specific geotechnical investigation will be completed to ensure that piles, retaining walls, and other structures will not impact geology and topography in the area. The final design will address any geotechnical hazards that are identified in the investigation.

- GEO-2** An erosion control plan will be prepared prior to construction of the project. The erosion control plan must specify measures such as soil stabilization. As described in the Caltrans Plans Preparation Manual: “The locations and details of the erosion control materials shall be shown on the erosion control plans. Erosion control materials may include, but are not limited to, compost, straw, fiber, stabilizing emulsion, and erosion control blankets/mats.”
- GEO-3** If slopes are going to be constructed steeper than 2:1 (H:V), then stability analyses shall be performed during the final design phase.
- GEO-4** During final design, the most suitable pile type shall be used based on the geotechnical data, site-specific investigation, cost considerations, and the latest Caltrans requirements by using Working Stress Design or Load and Resistance Factor Design methods for abutment and bent.
- GEO-5** Earthwork shall conform to requirements of the Caltrans Standard Specifications, Section 19. Soil compaction shall be accomplished in accordance with Section 19-5 of the Standard Specifications. The subgrade shall be compacted to at least 95 percent of the laboratory maximum dry density. Fill placed during widening of the embankments shall be benched into the existing slopes as described in Section 19-6.1 of the Standard Specifications. Actual depths and extend of toe-of-fill keyways will be determined during site-specific investigations.
- GEO-6** Import soils shall have the minimum characteristics:
- Non-reactive to Portland cement concrete, or cement type shall reflect corrosivity test results.
  - Have shear values of a minimum cohesion equal to 100 pounds per square inch and friction angle of 30 degrees or a combination of strength parameters that will provide a safety factor of at least 1.5 static and 1.1 pseudostatic stability analysis results.
  - Expansion index shall be equal to or less than 20.
- GEO-7** A minimum over-excavation shall be performed within all areas to receive compacted fill. The over-excavation should extend horizontally a minimum distance equal to the depth of excavation from the edges of new fill.

**GEO-8** If soundwalls are determined feasible and reasonable on the hillside homes south of SR 91, then a geotechnical engineer will review the plans to ensure the stability of these soundwalls.

### **Hazardous Waste/Materials**

**HW-1** There is a possibility of encountering polychlorinated biphenyl (PCB)-containing liquids, asbestos-containing materials (ACMs), lead-based paint (LBP), and aerially deposited lead (ADL) during construction. Any hazardous materials encountered shall be managed accordingly.

**HW-2** Pole-top transformers with PCB-containing liquids shall be properly managed if they are to be removed or relocated.

**HW-3** Prior to the final environmental document, presumed ACM materials, including rails, bearing pads, support piers, expansion joint material of bridges, asphalt, and concrete, will be surveyed and assessed in compliance with 40 CFR (*Code of Federal Regulations*) 763. During construction, if bridge structures not previously tested for asbestos are anticipated to be disturbed or if suspect ACMs are discovered, the contractor shall stop work and these materials will be surveyed and assessed for asbestos prior to disturbance.

**HW-4** Paint used for lane striping shall be tested for LBP prior to demolition/removal to determine proper handling and disposal requirements.

**HW-5** Any soils with ADL contamination shall be managed properly and disposed. During project construction, soil in the project limits may be reused within Department ROW, provided it is placed a minimum of 5 feet (ft) above the maximum water table and is covered by pavement. Soil export will be minimized, and excess soil generated during project construction, if any, will be disposed of at a non-Resource Conservation and Recovery Act (RCRA) California Class I hazardous waste disposal facility.

**HW-6** LBP, ACM, and ADL surveys shall be conducted if data has not already been collected in this area by previous projects. LBP, ACM, ADL, and herbicide/pesticide surveys should take approximately 4 to 6 weeks (for sampling and report generation). Further needed investigations will be postponed until final design is complete.

## **Air Quality**

**AQ-1** In addition to the South Coast Air Quality Management District (SCAQMD) rules, the following mitigation measures set forth a program of air pollution control strategies that will ensure that construction emissions will not exceed any applicable standard. Measures 1 and 2 include fugitive dust reduction strategies, in addition to Rule 403 requirements. Measures 3 through 5 provide reduction for other contaminants, including nitrogen oxide (NO<sub>x</sub>) emissions.

1. In addition to SCAQMD Rule 403 requirements, apply water to all excavation/grading activity areas as necessary to remain visibly moist during active operations.
2. Apply nontoxic soil stabilizers, as needed, to reduce offsite transport of fugitive dust from unpaved staging areas and unpaved road surfaces.
3. Properly tune and maintain construction equipment and vehicles in accordance with manufacturer's specifications. Low-sulfur fuel shall be used in construction equipment per California Code of Regulations (CCR) Title 17, Section 93114.
4. During construction, keep trucks and vehicles in loading/unloading queues with their engines off when not in use to reduce vehicle emissions. Phase construction activities to avoid emissions peaks, where feasible, and discontinue during second-stage smog alerts.
5. To the extent feasible, use construction equipment that is either equipped with diesel oxidation catalyst or is powered by alternative fuel sources (e.g., methanol, natural gas).
6. Active construction areas shall be watered regularly to control dust and minimize impacts to adjacent vegetation.

All measures provided above and included in SCAQMD Rules 403 and 1403 that are applicable to the project construction activities shall be implemented to the extent feasible to avoid adverse short-term air quality impacts.

**AQ-2** Active construction areas shall be watered regularly to control dust and minimize impacts to control dust and minimize impacts to adjacent vegetation.

## **Noise**

**N-1** Construction noise control and noise monitoring must comply with Caltrans General "5-1 Noise Control" standard special provisions. This section applies to equipment on the project or associated with the project, including trucks, transit

mixers, stationary equipment, and transient equipment. Do not exceed 86 A-weighted decibels (dBA) at 50 ft from the project limits from 7:00 p.m. to 7:00 a.m. Do not operate construction equipment or run equipment engines from 7:00 p.m. to 7:00 a.m. or on Sundays, except you may operate within the project limits during these hours to:

- Service traffic control facilities
- Service construction equipment

Noise Monitoring

Provide one Type 1 sound-level meter and one acoustic calibrator to be used by the Department until contract acceptance. Provide training by a person trained in noise monitoring to one Department employee designated by the Engineer. The sound-level meter must be calibrated and certified by the manufacturer or other independent acoustical laboratory before delivery to the Department. Provide annual recalibration by the manufacturer or other independent acoustical laboratory. The sound-level meter must be capable of taking measurements using the A-weighting network and the slow response settings. The measurement microphone must be fitted with a windscreen. The Department returns the equipment to you at contract acceptance. The contract lump sum price paid for noise monitoring includes full compensation for furnishing all labor, material, tools, equipment, and incidentals and for doing all work involved in noise monitoring.

- N-2** If possible, avoid using impact pile driving for bridge demolition/reconstruction. Utilize less noise-intrusive piling techniques using vibratory pile driving or cast-in-drilled-hole (CIDH) piling.
- N-3** In case of construction noise complaints by the public, the construction manager will be notified and noise monitoring will be conducted if necessary.
- N-4** All equipment will have sound-control devices no less effective than those provided on the original equipment. No equipment will have an unmuffled exhaust.
- N-5** Truck loading, unloading, and hauling operations will be conducted so that associated noise impacts are kept to a minimum by carefully selecting routes to avoid going through residential neighborhoods to the greatest possible extent.

- N-6** Use and relocate temporary barriers, if warranted and practicable, to protect sensitive receptors from excessive construction noise. Such temporary noise barriers can be made of heavy plywood or moveable insulated sound blankets. They will be free of visible internal gaps, and the material will provide a transmission loss of at minimum 15 dBA (preferably at least 20 dBA) relative to the noise source requiring abatement so that it can provide a useful level of insertion loss when used as a barrier.
- N-7** As directed by the Department's resident engineer, the contractor will implement appropriate additional noise abatement measures including, but not limited to, changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around stationary construction noise sources.
- N-8** If soundwalls are determined to be acceptable by the property owners, then soundwalls S63, S98, S110, and S114 will be constructed along their property line. Additional coordination will be necessary with the property owners to determine the schedule for construction and to negotiate agreements for maintenance. It should be noted that if any of these soundwalls are constructed as part of the other projects that may precede construction of the proposed project (SR 91 Green River Road Widening, SR 91 Eastbound Lane Addition, SR 91 CIP, SR 71 Widening and Corridor A Project), noise abatement at these locations by the proposed project will not be required.

### **Biological Environment**

- BIO-1** The limits of grading required for all aspects of the interchange and construction staging areas will be clearly marked, and all construction areas, including staging of construction equipment, will be surveyed.
- BIO-2** Planned roads will be located in the least environmentally sensitive location feasible, including disturbed and developed areas or areas that have been previously altered.
- BIO-3** Alignments will follow existing roads, easements, ROWs, and disturbed areas, as appropriate, to minimize habitat fragmentation. Implementation of BMPs, as discussed in Section 5.2.5 of the SR 91 and SR 71 Interchange Improvement Project Habitat Assessment and Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis Report (Parsons/MBA 2010), preconstruction surveys, construction monitoring, and prescribed mitigation for impacts to riparian/riverine areas, will reduce all potential impacts to sensitive species not considered adequately conserved under the MSHCP to less than substantial.

- BIO-4** To offset impacts to jurisdictional resources, RCTC will obtain mitigation credits at a minimum ratio of 2:1. Currently, there are three potential mitigation areas under consideration by RCTC for riparian/riverine and jurisdiction resources mitigation: (1) purchasing mitigation credits from the Santa Ana Watershed Association (SAWA) to aid in the eradication of giant reed (*Arundo donax*) and salt cedar (*Tamarix* sp.) throughout the reach of the Santa Ana Watershed; (2) restoration of lands within Chino Hills State Park (CHSP); and (3) restoration of lands within the Green River Golf Course. An acceptable mitigation ratio will be negotiated through the Determination of Biological Equivalent or Superior Preservation (DBESP) and permitting processes with the Riverside County Conservation Agency, USACE, RWQCB, and California Department of Fish and Game (CDFG).
- BIO-5** If jurisdiction is confirmed by USACE, RWQCB, and CDFG, then the following permits will be acquired: a Section 404 permit from USACE pursuant to Section 404 of the Clean Water Act (CWA); a Section 401 Water Quality Certification from the RWQCB; and a Section 1600 Streambed Alteration Agreement from CDFG pursuant to Section 1600 of the California Fish and Game Code.
- BIO-6** Planned roads will avoid, to the greatest extent feasible, impacts to wetlands. If wetlands avoidance is not possible, then any impacts to wetlands will require issuance of and mitigation in accordance with a Federal Section 404 and/or State Section 1600 permit.
- BIO-7** No temporary or permanent impacts to any federally or State-listed threatened or endangered plant species will occur. Impacts to commonly occurring species or California Native Plant Society (CNPS) Sensitive Species will be minimized to the extent practicable; therefore, no compensatory mitigation regarding special-status plant species is required.
- BIO-8** To minimize direct impacts to special-status plant species, the limits of grading required for all aspects of the interchange and construction staging areas will occur entirely within Department ROW or temporary construction easements and will be clearly marked.
- BIO-9** Preconstruction surveys will be conducted for sensitive plants after the final construction ROW has been established. All appropriate plants will be tagged and moved to appropriate offsite locations prior to the start of grading. It may be possible that plants will be salvaged, stored, and replanted within disturbed areas subsequent to construction.

- BIO-10** The appropriate biological surveys will be based on field conditions and recommendations of the project manager in consultation with a qualified biologist. The results of the biological resources investigations will be mapped and documented. The documentation will include preliminary conclusions and recommendations regarding potential effects of facility construction on MSHCP Conservation Area resources and methods to avoid and minimize impacts to these resources in conjunction with project siting, design, construction, and operation. The project biologist will work with facility designers during the design and construction phase to ensure implementation of feasible recommendations.
- BIO-11** Design of planned roads will consider wildlife movement requirements, as further outlined in Section 7.5.2 “Guidelines for Construction of Wildlife Corridors,” and any construction, maintenance, and operation activities that involve clearing of natural vegetation will be conducted outside the active breeding season (February 15 through August 31).
- BIO-12** Prior to design and construction of transportation facilities, biological surveys will be conducted within the Biological Study Area (BSA) for the facility, including vegetation mapping and species surveys and/or wetland delineations. The appropriate biological surveys will be based on field conditions and recommendations of the project manager in consultation with a qualified biologist. The results of the biological resources investigations will be mapped and documented. The documentation will include preliminary conclusions and recommendations regarding potential effects of facility construction on MSHCP Conservation Area resources and methods to avoid and minimize impacts to these resources in conjunction with project siting, design, construction, and operation. The project biologist will work with facility designers during the design and construction phase to ensure implementation of feasible recommendations.
- BIO-13** For the wildlife fencing on SR 91 and SR 71, consideration will be given during design to avoid disturbance of the fencing or movement of wildlife. If the project requires removal of the fencing, then biological monitoring will be required and replacement of any disturbed fencing will occur after construction.
- BIO-14** An appropriate openness ratio of at least 0.6 (calculated in meters as [opening width X height/length of crossing]) and height for crossings intended for use by medium- and large sized-wildlife will be maintained. The openness ratio, a function of a structure’s length [(height x width)/length], is important for larger animals

when using culverts and highway undercrossings. To maintain the integrity of the wildlife corridor, the design plans of culvert improvements in the Fresno Canyon area will be submitted to the wildlife agencies for review and approval.

- BIO-15** Crossing facilities will be vegetated as naturally as possible to mimic the surrounding natural crossing area. In some instances, vegetation may need to be tailored to match the needs of the focused species. Natural objects, such as stumps, rocks, and other natural debris, will be used within the crossing facility to create cover for wildlife and to encourage the use of crossings. The landscaping plans near the wildlife corridor areas will be submitted to the wildlife agencies for review and approval.
- BIO-16** Sediment and erosion control measures will be implemented until such time soils are determined to be successfully stabilized.
- BIO-17** Equipment storage, fueling, and staging areas will be sited on non-sensitive upland habitat types with minimal risk of direct discharge into riparian areas or other sensitive habitat types.
- BIO-18** During construction, the placement of equipment within the stream or on adjacent banks or adjacent upland habitats occupied by Covered Species that are outside of the project footprint will be avoided.
- BIO-19** When work is conducted during the fire season (as identified by the Riverside County Fire Department) adjacent to coastal sage scrub or chaparral vegetation, appropriate fire-fighting equipment (e.g., extinguishers, shovels, water tankers) shall be available onsite during all phases of project construction to help minimize the chance of human-caused wildfires. Shields, protective mats, and/or other fire preventive methods shall be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventive actions, and responses to fires shall advise contractors regarding fire risk from all construction-related activities.
- BIO-20** Active construction areas shall be watered regularly to control dust and minimize impacts to adjacent vegetation.
- BIO-21** All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances shall occur only in designated areas within the proposed grading limits of the project site. These designated areas shall be clearly marked and located in such a manner as to contain runoff.

- BIO-22** Waste, dirt, rubble, or trash shall not be deposited in the Conservation Area or on native habitat. No erodible materials will be deposited into water courses. Brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks. Silt fencing or other sediment trapping materials will be installed at the downstream end of construction activities to minimize the transport of sediments offsite.
- BIO-23** Impacts to Species of Special Concern, such as the coast horned lizard, although adverse, are not considered substantial; however, to avoid any impacts to the coast horned lizard, a qualified biological monitor will be onsite during the construction phase of the project to ensure that direct take of this species does not occur.
- BIO-24** To avoid impacts to bats and potentially suitable habitat for day, night, and maternity roosting, construction activities should avoid the maternity season (March through August). In addition, a qualified biologist will conduct a preconstruction survey to determine if the construction area contains roosting or maternity colonies. If work must be conducted during the maternity period and roost locations are not occupied, exclusion devices will be installed in all potential roosting locations before March and maintained throughout construction. If work must be conducted during the maternity period and roost locations are found to be occupied, then a sufficient buffer, in consultation with CDFG, will be maintained around any bat roosting or maternity colony. In addition, a qualified biological monitor will be onsite during the construction phase of the project to ensure that no direct take occurs and there is no nest abandonment due to excessive disturbance. Any active nurseries found onsite and mitigation to offset impacts to bat species will be coordinated with CDFG.
- BIO-25** To avoid impacts to nesting birds, including burrowing owl, a preconstruction nesting bird and burrowing owl clearance survey shall be conducted within 14 days prior to ground-disturbing activities. The survey shall be conducted in accordance with CDFG-accepted survey protocol for burrowing owl. If nesting birds or burrowing owls occupy the impact area, the occupied nest or burrow and a 250-ft buffer around the nest or burrow must be avoided until a qualified biologist has determined that the nest or burrow is no longer occupied. During the non-breeding season, burrowing owls can be relocated through passive relocation. During the breeding season (approximately February through August), avian nests and a 250-ft buffer around the nest must be avoided until it is determined by a qualified biologist that the young are no longer dependent on the nest. At such time, burrowing owls can be passively relocated. All relocation activities must be coordinated with CDFG.

- BIO-26** Equipment maintenance, lighting, and staging must be in designated areas away from wildlife corridor entrances. If work must be done at night, noise and direct lighting will be directed away from the corridor.
- BIO-27** To minimize impacts to the Santa Ana sucker, construction BMPs will be implemented, such as scheduling construction of the flyover structure during low-flow conditions for the Santa Ana River or outside of the Santa Ana sucker breeding season. In addition, the project will comply with the General NPDES permit for Storm Water Discharges during Construction with preparation of an SWPPP. The SWPPP will include all of the stormwater BMPs that will minimize erosion and sedimentation into the Santa Ana River.
- BIO-28** Timing of construction activities will consider seasonal requirements for breeding birds and migratory nonresident species. Habitat clearing will be avoided during species' active breeding seasons, generally defined as February to August.
- BIO-29** In compliance with the Executive Order on Invasive Species, EO 13112, and subsequent guidance from the Federal Highway Administration (FHWA), the landscaping and erosion control included in the project will not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or adjacent to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.
- BIO-30** Implementation of the BMPs discussed in Section 5.2.5 of the SR 91 and SR 71 Interchange Improvement Project Habitat Assessment and MSHCP Consistency Analysis Report (Parsons/MBA 2010) will limit the introduction of invasive species into the Conservation Area and will reduce any potential impacts to adjacent sensitive communities to less than substantial.

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Deputy District Director  
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Date

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**APPENDICES**

A CEQA Checklist

B Section 4(f) and Section 6(f) Correspondence

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D Relocation Assistance Program

E Glossary of Technical Terms

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**LIST OF TECHNICAL STUDIES (UNDER SEPARATE COVER)**

The following technical studies are incorporated by reference into this IS/EA:

**Technical Report**

Air Quality Technical Study  
Archaeological Survey Report  
Floodplain Evaluation Summary Report  
Historic Property Survey Report  
Initial Site Assessment  
Natural Environment Study  
Noise Abatement Decision Report  
Noise Study Report  
Paleontological Identification/Evaluation Report  
Traffic Study Report  
Visual Impact Assessment  
Water Quality Report

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